Schwegman's Value-Driven Portfolio Development



Guiding principles for evaluating patent prosecution service providers

Evaluating and guiding patent portfolio development based on the cost of patent acquisition without measuring the value of the resultant portfolio, makes no more sense than evaluating the performance of an investment portfolio without measuring its return-on-investment.

It doesn't take a Harvard MBA to realize this, yet this approach to portfolio development is widespread in industry.

Schwegman is leading the industry in revolutionizing the methodologies and tools for portfolio development to maximize quality and value, and reduce waste.

Startling Fact: Portfolio value is heavily weighted in top 20 % or fewer of patents



- Typically, nearly 100% of value is in top 20% of patents, and most of that in top 10%
- Not unusually, bottom 80% is worth little or nothing

Why is value so concentrated in a small percentage of portfolio?

- Overall, only a very small percentage of patents are both broadly preclusive and cover valuable technologies
- A large number of patents are filed on inventions/technologies that for any number of reasons, are never successfully commercialized
- Prior art unknown or unknowable at the time of filing later invalidates or greatly narrows available protection
- Errors or omissions during drafting or prosecution reduce or gut possible protection

So, why can't we just file on valuable inventions?

- Most patents must be filed before commercial value is known
- The patentability of many inventions is often much less than initially expected due to prior art not known at the time of filing
- Some technologies may not appear important at first, but later become very important, so it is unwise to be overly restrictive in choosing inventions to patent

Why does the quality of patent work matter?

- Most of the time, e.g., where patents have low or no value for reasons unrelated to the quality of the patent drafting or prosecution, the efforts of patent counsel make little difference in the value of a patent
- But in the case of high value patent applications, the quality of drafting and prosecution can make an enormous difference in the value of the resulting patent

When quality really matters...

- If a patent turns out to be worthless because the technology it covers becomes obsolete before it is commercialized, no amount of money invested in its drafting will make it valuable
- On the other hand, if a patent has the potential to be worth \$50M, the efforts of the drafting or prosecuting attorney/firm can make the difference of tens of millions of dollars in value
- Unfortunately, important differences in quality are very difficult for inventors or non-patent specialists to discern

The cost/value curve for hypothetical high-value patent

 In the curve to the right, A, B, C, D and E each represent various levels of quality of an application for the same invention



Quality level	Characteristics of Application
A	Virtual copy of invention disclosure with no extra embodiments, minimal claims, little or no prior art analysis
В	A + some effort to round out invention disclosure and draft a full set of claims – Application meets "standard of care" for drafting an application
с	B + an effort to anticipate and describe a range of alternate embodiments
D	C + abstraction of the invention to higher genus and adding prophetic embodiments, plus more robust dependent claim sets
E	D + extra effort to fully work around prior art, add more alternate embodiments, and integrate patentability theories

The cost/value curve for hypothetical high-value patent



 As demonstrated in previous slide, a legally sufficient patent application B value can be achieved at cost of \$4K and a value of \$1.5M, but for a small incremental cost of \$4K (cost segment B-D), \$3M of value can be added -- a huge ROI

Cost savings vs. quality/value

- Assume a 100 patent portfolio that costs \$3M to obtain, and yields 3 high-value patents that are worth \$6M over their life
- A 20% reduction in cost of patent services saves \$600K
- If cost savings results in a 10% quality/value sacrifice of the high value patents, then the lost opportunity cost of the savings is \$1.2M, for a net loss of value of \$600K
- If even one of the top patents is totally "blown" due to poor drafting or prosecution, the lost opportunity cost is \$4M, for a net cost of \$3.4M
- These "someone blew it" failures are usually discovered at a critical juncture for the company when it is no longer possible to remediate the errors

What are the factors for patent quality? – big picture

- Quality of the personnel doing the work
- Quality of the training of the personnel
- Quality of the systems and procedures used by the personnel
- Quality of the supervision of the personnel
- Providing the personnel enough time to do a thorough job, and not have to cut corners to make budget

What do patent attorneys spend their time on drafting patents?

- Optimizing patent value requires careful consideration of all aspects and dimensions of the invention and the prior art, elaboration of the inventive aspects, and careful claim drafting
- These activities require time and reiteration, in order to author a quality patent application that maximizes the chances for full exploitation of the protection available for the invention

Roughly, how is this time spent?

- Day one: study the disclosure and prior art, and draft initial claim or claims
- Day two: revise initial claims and expand claim set, create alternate embodiments, and start planning illustrations
- Days three and four: draft specification and work on illustrations, proof read application and illustrations, double check all definitions for consistency
- Day five: incorporate inventor comments and make revisions, proof read final draft of application

Key portfolio drafting observations

- Most of the inventions/patents selected for patenting have potential high value, notwithstanding that few pan out
- Accordingly, most applications need to be drafted as if they could possibly be highly valuable
- Less time and effort can be afforded to the inventions with lower expectations

Conventional "static" portfolio management and budgeting

- 90%+ of applications are prosecuted to issuance even if they have no demonstrable value
- Approximately 50% of spend is for drafting
- Approximately 50% of spend is for prosecution
- Since applications are rarely pared or downgraded in prosecution, considerable prosecution spend is wasted

Schwegman's dynamic value-driven portfolio management and budgeting

- Value of each application is established prior to drafting and filing
- Value and focus of coverage is reevaluated with product managers at each major milestone
- Only valuable applications are prosecuted to issuance, targeting key aspects (low value cases are dropped or issued quickly at low cost)
- Wasteful prosecution costs are significantly reduced
- Overall quality of portfolio is enhanced without increasing spend, and typically with a savings due to less wasteful spending
- Product managers stay engaged in directing portfolio development, enhancing institutional knowledge

Process milestones for assessments

- Pre-filing milestones:
 - Patent Committee Meetings –select high potential inventions for patenting, primarily based on commercial prospect for technology
 - Patentability Search reject inventions for which there is little intrinsic available patent scope
- Examination milestones
 - after each PTO Office Action or Allowance, reassess technology value and intrinsic available patent scope & "re-aim" value applications
- After Issuance milestones
 - reassess same factors as Examination for annuity payments

Quick ongoing reassessment is made possible using Schwegman's claim mapping methodology

- When each application is filed, the claim coverage is mapped and saved for later reassessments
- At each PTO Office Action milestone, reduction in expected available scope of coverage will be assessed, and also value of the technology, using adjusted claim maps
- Applications are re-rated for potential value, and efforts are readjusted based on the patent's potential value

"Quick" reassessment logistics

- A 15 minute call with product manager will be scheduled to reassess assumptions about technology value and the available patent scope, in order to reassess assigned category
- Product manager will log into GoToMeeting session and attorney will present, in layman's format, an accurate picture of claim coverage
- Through this mechanism, product managers and patent counsel will work in tandem to redirect effort toward high value patents

Overall portfolio value review

- Periodically, product managers and patent counsel will perform a "categorization valuation" of the issued and pending portfolio to identify
 - Patents being used, and broadly preclusive
 - Patents being used, but not broadly preclusive
 - Patents with reasonable potential for future use, and reasonably preclusive
 - Other patents not meeting above criteria
- Goal is to increase or maintain the highest percentage of the first three categories as possible

Getting started

- The best way to get started is to review all pending and issued applications against value criteria
- This establishes our baseline to improve against, and establishes the current "yield" being obtained by existing patent counsel
- Patent counsel should be evaluated based on the percentage of cases they have obtained for the company that have actual current use or likely future use